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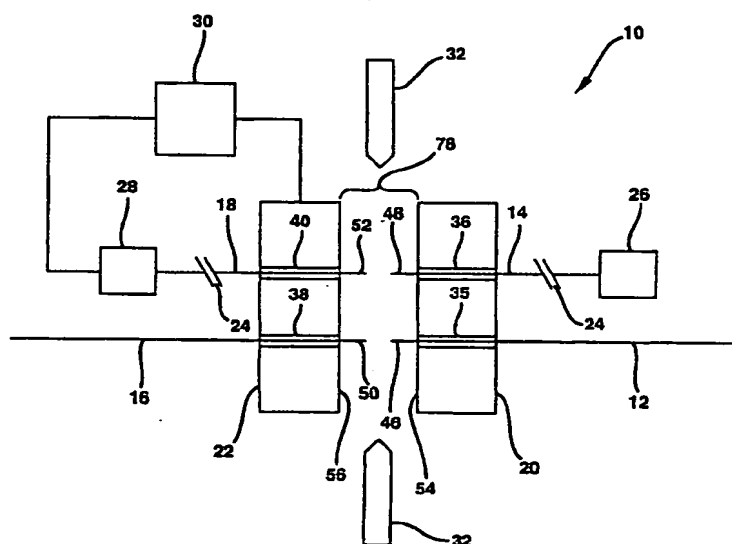
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(54) Title: **OPTICAL FIBER SPLICING PROCESS**



(57) Abstract: A method and apparatus for aligning and splicing optical fibers (12, 14, 16, 18) whereby the splice losses may be accurately calculated. Two optical fibers (12, 16) are loaded into two grooved supports (20, 22) and secured in place. The optical fibers (12, 16) are cleaved resulting in four cleaved ends (46, 48, 50, 52). The second grooved support (22) is rotated about an axis (72) aligning cleaved ends (46, 50) and cleaved ends (48, 52) with one another. The cleaved ends (46, 50) are then spliced to one another. The splice losses associated with splicing cleaved ends (46, 50) to one another may be accurately estimated by splicing the remaining cleaved ends (48, 52) together and measuring the optical losses across the splice.

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